

Amendments to the Claims:

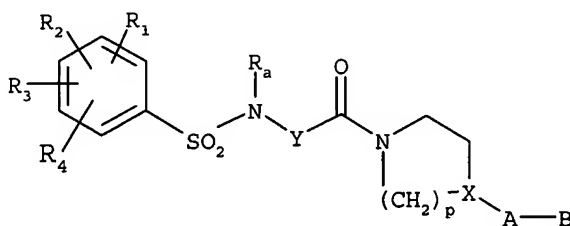
This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-9 are amended.

5 **Listing of Claims:**

1. (Currently Amended) A benzenesulphonamide derivative compound,
~~characterized in that it is~~ selected from the group consisting of:

a) compounds of formula:



in which,

[-] R₁, R₂, R₃, R₄ each independently represent one or more atoms or groups of atoms
selected from a hydrogen atom, the halogens, C₁-C₃ alkyl groups, or C₁-C₃ alkoxy groups,

15 CF₃ or OCF₃ groups,

[-] R_a represents a C₁-C₄ alkyl group,

[-] Y represents a saturated C₂-C₅ alkylene group, optionally interrupted by an oxygen
atom, an unsaturated C₂-C₄ alkylene group, or a -CH₂-CO-NH-CH₂- group,

[-] X represents CH or a nitrogen atom,

20 [-] p represents 2 or 3,

[-] A represents a single bond, a nitrogen atom optionally substituted with a methyl
group, or a straight or branched C₁-C₅ alkylene group optionally hydroxylated or of which
one of the carbon atoms is oxidized into a ketone function, provided that A and X
together do not represent a nitrogen atom,

25 [-] B represents a nitrogen-containing heterocycle or an amine group optionally
substituted with one or two C₁-C₄ alkyl groups,

b) addition salts of the above formula I compounds with an acid.

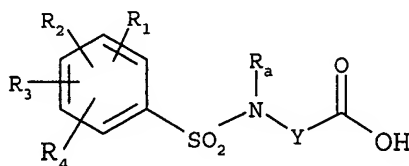
2. (Currently Amended) A compound according to claim 1, ~~characterized in that~~
wherein Y represents a C₃-C₅ alkylene group interrupted by an oxygen atom, preferably a-
CH₂-CH₂-O-CH₂- group.

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3. (Currently Amended) A compound according to claim 1, wherein ~~or 2,~~
~~characterized in that~~ R₂ and R₃ represent a methyl group at position 2,6 on the aromatic ring.

4. (Currently Amended) A method for preparing a formula I compound as defined in
10 claim 1, and its addition salts, comprising ~~the steps consisting of:~~

a) allowing an acid of formula:



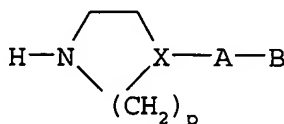
II

15 in which

R₁, R₂, R₃ and R₄ each independently represent a hydrogen or halogen atom, a C₁-C₃ alkyl
group, or a C₁-C₃ alkoxy group, CF₃ or OCF₃ group,

R_a represents a C₁-C₄ alkyl group,

Y represents a saturated C₂-C₅ alkylene group, optionally interrupted by an oxygen atom, an
20 unsaturated C₂-C₄ alkylene group, or a -CH₂-CO-NH-CH₂- group,
to react with a nitrogen-containing heterocycle of formula:



III

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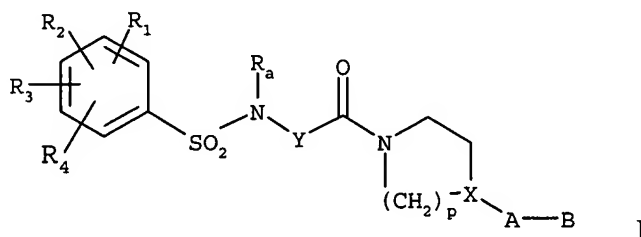
in which

X represents CH or a nitrogen atom,

p represents 2 or 3,

A represents a single bond, a nitrogen atom optionally substituted with a methyl group (if X does not represent a nitrogen atom), or a straight or branched C₁-C₅ alkylene group, optionally hydroxylated or of which one of the carbon atoms is oxidized into a ketone function,

- 5 B represents a nitrogen-containing heterocycle or an amine group optionally substituted with one or two C₁-C₄ alkyl groups, on the understanding that, should a non-substituted nitrogen atom be present, this nitrogen atom is protected by an amino-protecting group,
- in a solvent, in the presence of activators, at a temperature lying between ambient temperature and the boiling point of the solvent, for approximately 2 to 15 hours, to obtain
- 10 the amide of formula:



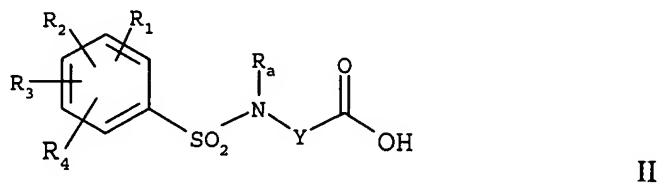
- in which R₁, R₂, R₃, R₄, R_a, Y, p, X, A and B maintain the same meaning as in the starting
- 15 products,

b) if necessary, removing the amino-protecting groups,

c) if necessary, obtaining an addition salt of the formula I compound with a mineral or organic acid.

5. (Currently Amended) A method for preparing a formula I compound as defined in
- 20 claim 1, and its addition salts, comprising the steps consisting of:

a) allowing an acid of formula:



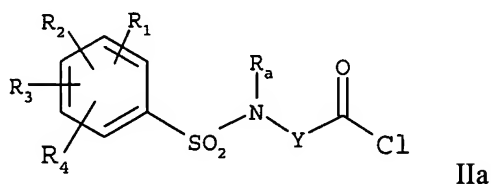
in which

R₁, R₂, R₃ and R₄ each independently represent a hydrogen or halogen atom, a C₁-C₃ alkyl group, or a C₁-C₃ alkoxy group, CF₃ or OCF₃ group,

R_a represents a C₁-C₄ alkyl group,

- 5 Y represents a saturated C₂-C₅ alkylene group, optionally interrupted by an oxygen atom, an unsaturated C₂-C₄ alkylene group, or a -CH₂-CO-NH-CH₂- group,

to react with a chlorination agent, to obtain the acid chloride of formula:



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in which R₁, R₂, R₃, R₄, R_a and Y have the same meaning as in the starting compound,

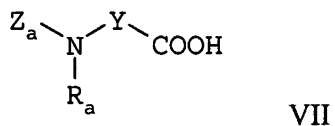
b) allowing the acid chloride of formula IIa to react with an amine of formula III as defined in claim 4, to obtain the compound of formula I,

- 15 c) if necessary, obtaining an addition salt of the formula I compound with a mineral or organic acid.

6. (Currently Amended) A method for preparing a formula I compound such as defined in claim 1, and its addition salts, comprising ~~the steps consisting of:~~

- a) allowing an acid compound of formula:

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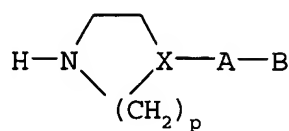


in which R_a represents a C₁-C₄ alkyl group,

Y represents a saturated C₂-C₅ alkylene group, optionally interrupted by an oxygen atom, and

- 25 Z_a represents an amino-protecting group,

to react with a nitrogen-containing heterocycle of formula:



. III

5 in which

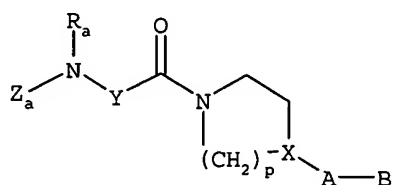
X represents CH or a nitrogen atom,

p represents 2 or 3,

A represents a single bond, a nitrogen atom optionally substituted with a methyl group (if X does not also represent a nitrogen atom) or a straight or branched C₁-C₅ alkylene group, optionally hydroxylated or of which one of the carbon atoms is oxidized into a ketone function,

B represents a nitrogen-containing heterocycle or an amine group optionally substituted with one or two C₁-C₄ alkyl groups, on the understanding that, should a non-substituted nitrogen atom be present on said nitrogen-containing heterocycle, this nitrogen atom is protected by a different amino-protecting group to the amino-protecting group used for acid compound VII,

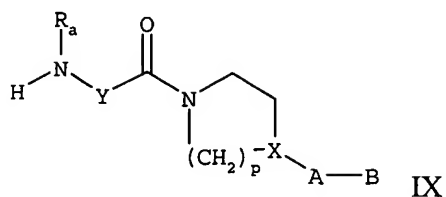
in a solvent, in the presence of activators, at a temperature generally lying between ambient temperature and the boiling point of the solvent, for approximately 2 to 15 hours, to obtain the amide of formula:



VIII

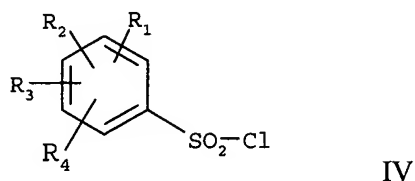
in which Z_a, R_a, Y, p, X, A and B maintain the same meaning as in the starting compounds,

b) removing the Z_a amino-protecting group to obtain the secondary amine of formula:

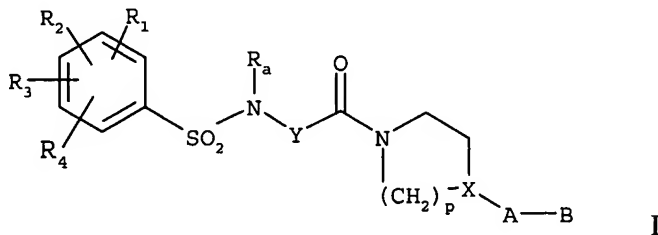


in which R_a , Y, p, X, A and B maintain the same meaning as in the preceding compound,

- 5 c) allowing this secondary amine IX to react with a benzenesulphonyl chloride of formula:



- 10 in which R_1 , R_2 , R_3 and R_4 each independently represent a hydrogen or halogen atom, a C_1 - C_3 alkyl group, or a C_1 - C_3 alkoxy group, CF_3 or OCF_3 group, in a solvent, in the presence of an aprotic organic base, at a temperature between approximately 0 and 50°C, for approximately 1 to 3 hours, to obtain the sulphonamide of formula:



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in which R_1 , R_2 , R_3 , R_4 , R_a , Y, p, X, A and B maintain the same meaning as in the starting compounds,

- d) if necessary, removing the amino-protecting groups,

e) if necessary, obtaining an addition salt of the formula I compound with a mineral or organic acid.

7. (Currently Amended) A therapeutic composition, ~~characterized in that~~ wherein, in association with at least one physiologically acceptable excipient, it contains at least one
5 formula I compound according to ~~any of claims 1 to 3~~ claim 1, or one of its pharmaceutically acceptable addition salts with an acid.

8. (Currently Amended) ~~Use of~~ A method of using a formula I compound according to ~~any of claims 1 to 3~~ claim 1, or of one of its pharmaceutically acceptable addition salts with an acid, for the preparation of a medicinal product intended to treat pain.

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9. (Currently Amended) ~~Use of~~ A method of using a formula I compound according to ~~any of claims 1 to 3~~ claim 1, or of one of its pharmaceutically acceptable addition salts with an acid, for the preparation of a medicinal product intended to treat inflammatory diseases.

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